DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-025377

Address: 333 Burma Road Date Inspected: 29-Jul-2011

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Orthotropic Box Girder

Summary of Items Observed:

At the start of the shift the Quality Assurance Inspector (QAI) traveled to the project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) personnel. The inspection was performed on the various field fit-up of weld joints and the Complete Joint Penetration (CJP). The welding was performed utilizing the Flux Cored Arc Welding (FCAW-G) process.

A). OBG E11/E12

The QAI observed the continued back gouging on the "B" face of the single-v-groove weld identified as Weld Number (WN): 10E-11E-C. This operation was performed by the welding personnel, Fred Kaddu utilizing the plasma arc cutting method.

B). OBG W10/W11

The QAI observed the continued CJP welding of the side plate field splice identified as 10W-11W-C utilizing the semi-automatic FCAW-G welding process as per the WPS ABF-WPS-D15-3042B-1 Rev. 0. The welding was performed by the welding operator Jin Pei Wang ID-7299 and the inspection was performed by the QC inspector Pat Swain utilizing the Welding Procedure Specification (WPS) as a reference during the monitoring of the welding and verifying the welding parameters. The welding was performed in the overhead (4G) position with the work placed in a fixed position at an approximate 22 degree incline. The in process welding and inspection appeared to comply with the contract documents.

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C). OBG W11/W12

The QAI observed the continued CJP welding of the side plate field splice identified as 10W-11W-E utilizing the semi-automatic FCAW-G welding process as per the WPS ABF-WPS-D15-3042B-1 Rev. 0. The welding was performed by the welding operator Hua Qiang Hwang ID-2930 and the inspection was performed by the QC inspector William Sherwood utilizing the WPS as a reference during the monitoring of the welding and verifying the welding parameters. The welding was performed in the vertical (3G) position with the work placed in a fixed position at an approximate 22 degree incline. The in process welding and inspection appeared to comply with the contract documents.

This QAI also observed CJP welding of the side plate field splice identified as 10W-11W-C utilizing the semi-automatic FCAW-G welding process as per the WPS ABF-WPS-D15-3042B-1 Rev. 0. The welding was performed by the welding operator James Zhen ID-6001 and the inspection was performed by the QC inspector William Sherwood utilizing the WPS as a reference during the monitoring of the welding and verifying the welding parameters. The welding was performed in the vertical (3G) position with the work placed in a fixed position at an approximate 22 degree incline. The in process welding and inspection appeared to comply with the contract documents.

This QA Inspector also performed a daily review of field inspection reports and update of the field document control tracking records regarding the Orthotropic Box Girders, Longitudinal and Transverse "A" Deck Stiffeners and Deck Access Holes.

QA Summary

The welding was performed in the flat and horizontal positions utilizing the E71T-1 consumable. The welding parameters and surface temperatures were verified by the QC inspector's utilizing a Fluke 337 clamp meter to measure the electrical welding parameters and Tempil Heat Indicators for verifying the preheat and interpass temperatures. At the time of the observation no issues were noted by the QAI.

The digital photographs below illustrate some of the work observed during this scheduled work date.





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Summary of Conversations:

There were general conversations with Quality Control Lead Inspector, Bonifacio Daquinag, Jr., at the start of the shift regarding the location of welding, inspection and N.D.E. testing personnel scheduled for this shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Reyes,Danny	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer